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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,146	12/01/2003	Hans-Armin Ohlmann	PAT 52876-2	1221
26123	7590	01/31/2005	EXAMINER	
BORDEN LADNER GERVAIS LLP WORLD EXCHANGE PLAZA 100 QUEEN STREET SUITE 1100 OTTAWA, ON K1P 1J9 CANADA			EDGAR, RICHARD A	
			ART UNIT	PAPER NUMBER
			3745	
DATE MAILED: 01/31/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,146

Applicant(s)

OHLMANN, HANS-ARMIN

Examiner

Richard Edgar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003 under 35 U.S.C. 111(a).
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,5,6,9,10,13 and 14 is/are rejected.
7) ☒ Claim(s) 3,4,7,8,11,12,15 and 16 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/2004.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

In paragraph 0013, "van" appears to be a misspelling of -- vane --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 2,335,817 issued to Topalov.

The Topalov patent shows in Figure 3 a vertical axis wind turbine, comprising two counter-rotating rotors 1 mounted on first and second spaced apart vertical axes 2, each said rotor having a plurality of rotor blades extending generally inwardly from an outer circumference, said vertical axes being mounted on a support structure 4 which is in turn rotatable on a third vertical axis 19 on a platform, said third axis being spaced from a point midway between the first and second axes in a direction at 90 degrees to and forward from a line between the first and second axes (see Figure 3), the vertical axis wind turbine further comprising a guide vane mounted on the support structure, having a vertex forward of the third vertical axis in the direction at 90 degrees from a line between the first and second axes, the guide vane having left and right symmetrical

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vane portions 33 extending towards the rotors so as to direct airflow from wind primarily towards portions of the rotors outboard of the first and second axes, the guide vane also tending to keep the vertical axis wind turbine oriented with the guide vane's axis of symmetry pointing forwardly into the wind (elements 20, 21 from Figure 1, see page 3, lines 34-37).

The guide vane 33 substantially shields portions of the rotors 1 inboard of the first and second vertical axes 2.

The rotor blades are curved in airfoil-like shapes relative to the airflow for enhanced efficacy relative to that of a straight blade (page 1, lines 40-43).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 2,335,817 issued to Topalov as applied to claims 1, 2, 5 and 6, respectively, above, and further in view of United States Patent No. 4,047,833 issued to Decker.

The Topalov reference discloses a vertical axis wind turbine but does not disclose an unrelated structure supported above the turbine.

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Decker shows in Figure 1, part of a building 11 supported above a vertical axis wind turbine for the purpose of minimizing costs associated with assembling the wind turbine.

Since Topalov show a vertical axis wind turbine and Decker suggest using a structure supported above a vertical axis wind turbine, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the vertical wind turbine of Topalov to have a structure supported above the wind turbine, as is shown by Decker, for the purpose of minimizing costs associated with the assembling the wind turbine.

Cited Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 419,345 (Otto) shows a wind turbine having counter-rotating rotors with pivoting regulating doors 13 for guiding the upstream fluid towards the rotors.

U.S. Patent No. 4,764,683 (Coombes) teaches a counter-rotating wind turbine with upstream vanes 34 pivoted about an axis 48 by moving a collar 50 vertically.

Allowable Subject Matter

Claims 3, 4, 7, 8, 11, 12, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

All of the claims listed immediately above require moveable deflector flaps on the ends of the vane portions, which when moved forwardly from a position coplanar with the vanes, deflect air away from the rotors.

The Topalov reference (U.S. Patent No. 2,335,817) does not have deflector flaps, but controls the rotor speed by pivoting the vanes to an open position (see lines 37, 38) to allow upstream air to enter the between the rotors, counteracting the rotational moment of the rotors.

Similarly, Pohl (U.S. Patent No. 4,156,580) uses flaps to control the speed of the rotors. However, the flaps are controlled to counteract (rotating the flaps to position b) the torque of the rotors, instead of deflecting the air away from the rotors.

Otto (U.S. Patent No. 419,345) controls the rotor speed by adjusting the volume of upstream air by pivoting regulating doors 13 to either a more open or more closed position. There are no flaps coplanar with the vanes 4.

Coombes (U.S. Patent No. 4,764,683) deflects air away from the rotors by pivoting the vanes, but does not fairly suggest using flaps.

In the examiner's opinion, it would have been nonobvious at the time the invention was made to a person having ordinary skill in the art to modify the Topalov (U.S. 2,335,817) turbine to have the pivoting deflector flaps as claimed, since none of

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the cited references, in any combination, fairly suggest the vanes with coplanar flaps which pivot forwardly to deflect air away from the rotors.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 8:00 am until 4:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard Edgar
Examiner
Art Unit 3745

RE


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1/16/05